

Data Center Switch DS410 Product Manual

Version:1.0

Products Description

The DS410 is a new-generation data center switch. It provides Layer 2 and Layer 3 full-line speed data exchange and supports 48×25GE ports and 8×100GE uplink ports. The DS410 meets the high performance, high availability, and elastic network requirements of enterprise and cloud computing data center applications. It can be deployed as a top-of-cabinet switch or in a 100GE distributed backbone network to form a data center network with non-blocking CLOS architecture.

The DS410 provides high reliability hardware design for data center application scenarios, including hot swappable AC power supply in 1+1 redundancy and fan module in 4+1 redundancy. In addition, it provides forward and backward heat dissipation



DS410 front view



DS410 rear view

Product Features

1. Performance

- ◆ Ports: 48 x10/25GE, 8 x 40/100GE
- ◆ 2/3 layer wire speed forwarding
- ◆ 40G/100G port: Supports 4x10G/4x25G mode

2. Data center optimization design

- ◆ Each port supports a virtual output queue
- ◆ Hot swappable power supply with 1+1 redundancy design
- ◆ 4+1 redundantly designed hot-swappable fan modules
- ◆ Easy to install

3. High performance controller

- ◆ x86 architecture COM-e modules
- ◆ Supports 16GB DDR4 memory with ECC
- ◆ Support 256GB SSD solid state drives, M.2 interface (SATA bus)
- ◆ Support for BMC, through which peripherals can be monitored and managed

4. The system supports the monitoring and recording functions of various events

- ◆ Voltage monitoring, support board level voltage monitoring
- ◆ Temperature monitoring
- ◆ Restart reason log

Product Specifications

Features	DS410
Port description	48x25GE SFP28 and 8x100GE QSFP28
Maximum number of 100GbE ports	8 ports
Maximum number of 25GbE ports	48 ports
Green Energy Saving	Support IEEE802.3az/ IEEE802.3bj Automatic port closing is supported Support timed port closing
Switching chip	Clounix CLX850032P
Swap capacity	2000 Gbps
CPU	Intel Broadwell DE D-1627 4 cores, 2.9GHz
DDR	8/16GB DDR4 with ECC (dual channel 2*8 GB)
SSD storage	128GB SSD solid state drive
BMC	Support
100/1000Mbps management network port	1 each
RS-232 port	1 each
USB port	1 each
Hot swap power supply	2 (1+1 redundancy)
Hot swappable fan	5 sets (4+1 redundancy)
Heat dissipation mode	Forward back out
Case size mm (width * depth * height)	442 x 465 x 44 IP20 is water and dust resistant
Weight (kg)	8kg

Features	DS410
Power supply type	550W AC
Input voltage range	100V ~ 240V AC, 50 / 60HZ
Power consumption of the machine	Static: TBD W Full load: TBD W
Operating temperature range	0°C ~ 45°C
Operating humidity (no condensation)	5% ~ 95%
Product certification	subject to re-certification according to end-customer requirements
Level of protection	Power port: GR-1089, differential mode/common mode 6kV L2 function 4K vlans are supported
L2 function	Support for IEEE 802.3ad
	Support for static and dynamic link aggregation
	Support for Jumbo Frames
	PFCS support
	LLDP v1/v2 and LLDP MED are supported
	Supports MAC address learning and aging
	Support for port mirroring
	Support port splitting
L3 function	BGP routing protocol is supported Support BGP MP and smooth restart
	Support for ARP protocol

Features	DS410
QoS	Support for DHCP relay agents
	Support for IP decryption (v4/v6)
	Support service levels
ACL	Support for WRED(ECN)
	Support for IPv4/v6, L2/L3
AAA	TACACS+ support
	gRPC support
	RDMA support
System	Support Syslog and Sysdump
	NTP support
	Support for incremental configuration
management	Support for SONiC to SONiC upgrades
	Support for quick restarts
	Support for quick restarts
	Support SNMP
	Support for critical resource monitoring